SEQUENCE LISTING

<110> Genentech, Inc.

<120> COMPOSITIONS WITH HEMATOPOIETIC AND IMMUNE ACTIVITY

<130> 11669.162WOU1

<140> New Filing
<141> 2004-03-12

<150> US 60/454,462
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<150> US 60/511,390
<151> 2003-10-14

<160> 40

<170> PatentIn version 3.1

<210> 1
<211> 427
<212> DNA
<213> Artificial Sequence

<220>
<223> cDNA encoding a human Bv8 homologue

<400> 1
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gctgctgctc acgccccgcg ctggggacgc cgccgtgatc accggggctt gtgacaagga 120

ctcccaatgt ggtggaggca tgtgctgtgc tgtcagtatc tgggtcaaga gcataaggat 180

ttgcacacct atgggcaaac tgggagacag ctgccatcca ctgactcgta aaaacaattt 240

tggaaatgga aggcaggaaa gaagaaagag gaagagaagc aaaaggaaaa aggaggttcc 300

atttttttggg cggaggatgc atcacacttg cccatgtctg ccaggcttgg cctgtttacg 360

gacttcattt aaccgattta tttgtttagc ccaaaagtaa tcgctctgga gtagaaacca 420

aatgtga 427

<210> 2
<211> 129
<212> PRT
<213> Homo sapiens

<400> 2

Met Arg Ser Leu Cys Cys Ala Pro Leu Leu Leu Leu Leu Leu Leu Pro
1 5 10 15

Pro Leu Leu Leu Thr Pro Arg Ala Gly Asp Ala Ala Val Ile Thr Gly
20 25 30

Ala Cys Asp Lys Asp Ser Gln Cys Gly Gly Gly Met Cys Cys Ala Val
35 40 45

Ser Ile Trp Val Lys Ser Ile Arg Ile Cys Thr Pro Met Gly Lys Leu
50 55 60

Gly Asp Ser Cys His Pro Leu Thr Arg Lys Asn Asn Phe Gly Asn Gly
65 70 75 80

Arg Gln Glu Arg Arg Lys Arg Lys Arg Ser Lys Arg Lys Lys Glu Val
85 90 95

Pro Phe Phe Gly Arg Arg Met His His Thr Cys Pro Cys Leu Pro Gly
100 105 110

Leu Ala Cys Leu Arg Thr Ser Phe Asn Arg Phe Ile Cys Leu Ala Gln
115 120 125

Lys

<210> 3
<211> 423
<212> DNA
<213> Artificial Sequence

<220>
<223> cDNA encoding human Bv8 homologue

<400> 3
tgagggcgcc atgaggagcc tgtgctgcgc cccactcctg ctcctcttgc tgctgccgcc 60

gagggcgcca tgaggagcct gtgctgcgcc ccactcctgc tcctcttgct gctgccgccg 120

ctgctgctca cgccccgcgc tggggacgcc gccgtgatca ccggggcttg tgacaaggac 180

tcccaatgtg gtggaggcat gtgctgtgct gtcagtatct gggtcaagag cataaggatt 240

tgcacaccta tgggcaaact gggagacagc tgccatccac tgactcgtaa agttccattt 300

tttgggcgga ggatgcatca cacttgccca tgtctgccag gcttggcctg tttacggact 360

tcatttaacc gatttatttg tttagcccaa aagtaatcgc tctggagtag aaaccaaatg 420

tga 423

<210> 4
<211> 108
<212> PRT
<213> Homo sapiens

<400> 4

Met Arg Ser Leu Cys Cys Ala Pro Leu Leu Leu Leu Leu Leu Leu Pro
1 5 10 15

Pro Leu Leu Leu Thr Pro Arg Ala Gly Asp Ala Ala Val Ile Thr Gly
20 25 30

Ala Cys Asp Lys Asp Ser Gln Cys Gly Gly Gly Met Cys Cys Ala Val
35 40 45

Ser Ile Trp Val Lys Ser Ile Arg Ile Cys Thr Pro Met Gly Lys Leu
50 55 60

Gly Asp Ser Cys His Pro Leu Thr Arg Lys Val Pro Phe Phe Gly Arg
65 70 75 80

Arg Met His His Thr Cys Pro Cys Leu Pro Gly Leu Ala Cys Leu Arg
85 90 95

Thr Ser Phe Asn Arg Phe Ile Cys Leu Ala Gln Lys
100 105

<210> 5
<211> 1338
<212> DNA
<213> Mus musculus

<400> 5
cggacgcgtg ggcgtcccct aaccgccacc gcgtccccgg gacgccatgg gggacccgcg 60

ctgtgccccg ctactgctac ttctgctgct accgctgctg ttcacaccgc ccgccgggga 120

tgccgcggtc atcaccgggg cttgcgacaa ggactctcag tgcggaggag gcatgtgctg 180

tgctgtcagt atctgggtta agagcataag gatctgcaca cctatgggcc aagtgggcga 240

cagctgccac cccctgactc ggaaagttcc attttggggg cggaggatgc accacacctg 300

cccctgcctg ccaggcttgg cgtgtttaag gacttctttc aaccggttta tttgcttggc 360

ccggaaatga tcactctgaa gtaggaactt gaaatgcgac cctccgctgc acaatgtccg 420

tcgagtctca cttgtaattg tggcaaacaa agaatactcc agaaagaaat gttctccccc 480

ttccttgact ttccaagtaa cgtttctatc tttgattttt gaagtggctt ttttttttt 540

ttttttttcc tttccttgaa ggaaagtttt gatttttgga gagatttata gaggactttc 600

tgacatggct tctcatttcc ctgtttatgt tttgccttga catttttgaa tgccaataac 660

aactgttttc acaaatagga gaataagagg gaacaatctg ttgcagaaac ttccttttgc 720

ccttttgcccc actcgccccg ccccgccccg ccccgccctg cccatgcgca gacagacaca 780

cccttactct tcaaagactc tgatgatcct caccttactg tagcattgtg ggtttctaca 840

cttccccgcc ttgctggtgg acccactgag gaggctcaga gagctagcac tgtacaggtt 900

tgaaccagat cccccaagca gctcatttgg ggcagacgtt gggagcgctc caggaacttt 960

cctgcaccca tctggcccac tggctttcag ttctgctgtt taactggtgg gaggacaaaa 1020

ttaacgggac cctgaaggaa cctggcccgt ttatctagat ttgtttaagt aaaagacatt 1080

ttctccttgt tgtggaatat tacatgtctt tttctttttt atctgaagct ttttttttt 1140

ttctttaagt cttcttgttg gagacatttt aaagaacgcc actcgaggaa gcattgattt 1200

tcatytggca tgacaggagt catcatttta aaaaatcggt gttaagttat aatttaaact 1260

ttatttgtaa cccaaaggty taatgtaaat ggatttcctg atatcctgcc atttgtactg 1320

gtatcaatat ttytatgt 1338

<210> 6
<211> 107
<212> PRT
<213> Mus musculus

<400> 6

Met Gly Asp Pro Arg Cys Ala Pro Leu Leu Leu Leu Leu Leu Leu Pro
1 5 10 15

Leu Leu Phe Thr Pro Pro Ala Gly Asp Ala Ala Val Ile Thr Gly Ala
20 25 30

Cys Asp Lys Asp Ser Gln Cys Gly Gly Gly Met Cys Cys Ala Val Ser
35 40 45

Ile Trp Val Lys Ser Ile Arg Ile Cys Thr Pro Met Gly Gln Val Gly
50 55 60

Asp Ser Cys His Pro Leu Thr Arg Lys Val Pro Phe Trp Gly Arg Arg
65 70 75 80

Met His His Thr Cys Pro Cys Leu Pro Gly Leu Ala Cys Leu Arg Thr
85 90 95

Ser Phe Asn Arg Phe Ile Cys Leu Ala Arg Lys
100 105

<210> 7

<211> 1415
<212> DNA
<213> Artificial Sequence

<220>
<223> cDNA encoding human native EG-VEGF

<400> 7
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ggcagtgttt tgccttcacc ccaagtgacc atgagaggtg ccacgcgagt ctcaatcatg 120

ctcctcctag taactgtgtc tgactgtgct gtgatcacag gggcctgtga gcgggatgtc 180

cagtgtgggg caggcacctg ctgtgccatc agcctgtggc ttcgagggct gcggatgtgc 240

accccgctgg ggcgggaagg cgaggagtgc caccccggca gccacaaggt ccccttcttc 300

aggaaacgca agcaccacac ctgtccttgc ttgcccaacc tgctgtgctc caggttcccg 360

gacggcaggt accgctgctc catggacttg aagaacatca atttttaggc gcttgcctgg 420

tctcaggata cccaccatcc ttttcctgag cacagcctgg atttttattt ctgccatgaa 480

acccagctcc catgactctc ccagtcccta cactgactac cctgatctct cttgtctagt 540

acgcacatat gcacacaggc agacatacct cccatcatga catggtcccc aggctggcct 600

gaggatgtca cagcttgagg ctgtggtgtg aaaggtggcc agcctggttc tcttccctgc 660

tcaggctgcc agagaggtgg taaatggcag aaaggacatt ccccctcccc tccccaggtg 720

acctgctctc tttcctgggc cctgcccctc tccccacatg tatccctcgg tctgaattag 780

acattcctgg gcacaggctc ttgggtgcat tgctcagagt cccaggtcct ggcctgaccc 840

tcaggccctt cacgtgaggt ctgtgaggac caatttgtgg gtagttcatc ttccctcgat 900

tggttaactc cttagtttca gaccacagac tcaagattgg ctcttcccag agggcagcag 960

acagtcaccc caaggcaggt gtagggagcc cagggaggcc aatcagcccc ctgaagactc 1020

tggtcccagt cagcctgtgg cttgtggcct gtgacctgtg accttctgcc agaattgtca 1080

tgcctctgag gccccctctt accacacttt accagttaac cactgaagcc cccaattccc 1140

acagcttttc cattaaaatg caaatggtgg tggttcaatc taatctgata ttgacatatt 1200

agaaggcaat tagggtgttt ccttaaacaa ctcctttcca aggatcagcc ctgagagcag 1260

gttggtgact ttgaggaggg cagtcctctg tccagattgg ggtgggagca agggacaggg 1320

agcagggcag gggctgaaag gggcactgat tcagaccagg gaggcaacta cacaccaaca 1380

tgctggcttt agaataaaag caccaactga aaaaa 1415

<210> 8
<211> 105
<212> PRT

<213> Homo sapiens

<400> 8

Met Arg Gly Ala Thr Arg Val Ser Ile Met Leu Leu Leu Val Thr Val
1 5 10 15

Ser Asp Cys Ala Val Ile Thr Gly Ala Cys Glu Arg Asp Val Gln Cys
20 25 30

Gly Ala Gly Thr Cys Cys Ala Ile Ser Leu Trp Leu Arg Gly Leu Arg
35 40 45

Met Cys Thr Pro Leu Gly Arg Glu Gly Glu Glu Cys His Pro Gly Ser
50 55 60

His Lys Val Pro Phe Phe Arg Lys Arg Lys His His Thr Cys Pro Cys
65 70 75 80

Leu Pro Asn Leu Leu Cys Ser Arg Phe Pro Asp Gly Arg Tyr Arg Cys
85 90 95

Ser Met Asp Leu Lys Asn Ile Asn Phe
100 105

<210> 9
<211> 757
<212> DNA
<213> Artificial Sequence

<220>
<223> cDNA encoding native mouse EG-VEGF

<400> 9
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ctgtgcatat cttcatcatg ctccttctag caacggcgtc cgactgtgcg gtcatcacag 120

gggcctgtga acgagatatc cagtgtgggg ccggcacctg ctgcgctatc agtctgtggc 180

tgcggggcct gcggttgtgt accccactgg ggcgtgaagg agaggagtgc cacccaggaa 240

gccacaagat ccccttcttg aggaaacgcc aacaccatac ctgtccctgc tcacccagcc 300

tgctgtgctc caggttcccg gacggcaggt accgctgctt ccgggacttg aagaataact 360

tttagtttgt ctggactctg tctggagcct gactgggtga cctcttgctt tacacctgtg 420

tgatttagct ccctgcaact tcgccattcc ccatcttgtc cgtgtatgtg cagacaggca 480

gaccttccgc tatggaatag ttcaccaggg tgcagagagg agttcgtggc cttgagaagt 540

tggccagccc gaccttcctg gctcagactg cctgaagttg tgacagtgtg ggccttctca 600

gttgcctgcc ccttcctgca tgtgcgcttc ttcctaaacc acacctttct gggcactggc 660

ccatggatgc accactaaat caacaggtct gtggggtgga tgatcaactt tctctccatt 720

tttcttttat tgactggctt cctaatttaa ggactgt 757

<210> 10
<211> 105
<212> PRT
<213> Mus musculus

<400> 10

Met Arg Gly Ala Val His Ile Phe Ile Met Leu Leu Leu Ala Thr Ala
1 5 10 15

Ser Asp Cys Ala Val Ile Thr Gly Ala Cys Glu Arg Asp Ile Gln Cys
20 25 30

Gly Ala Gly Thr Cys Cys Ala Ile Ser Leu Trp Leu Arg Gly Leu Arg
35 40 45

Leu Cys Thr Pro Leu Gly Arg Glu Gly Glu Glu Cys His Pro Gly Ser
50 55 60

His Lys Ile Pro Phe Leu Arg Lys Arg Gln His His Thr Cys Pro Cys
65 70 75 80

Ser Pro Ser Leu Leu Cys Ser Arg Phe Pro Asp Gly Arg Tyr Arg Cys
85 90 95

Phe Arg Asp Leu Lys Asn Ala Asn Phe
100 105

<210> 11
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 11
tgggctacac tgagcaccag 20

<210> 12
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 12
cagcgtcaaa ggtggaggag 20

<210> 13
<211> 28
<212> DNA
<213> Artificial Sequence

<220>
<223> Probe

<400> 13
tggtctcctc tgacttcaac agcgacac 28

<210> 14
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 14
ccatttttg ggcggagg 18

<210> 15
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 15
ccgtaaacag gccaagcct 19

<210> 16
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Probe

<400> 16
tgcatcacac ttgcccatgt ctgc 24

<210> 17
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 17
ccggcagcca caaggtc 17

<210> 18
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 18
tgggcaagca aggacagg 18

<210> 19
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Probe

<400> 19
ccttcttcag gaaacgcaag caccac 26

<210> 20
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 20
ggcgcccttc tacggct 17

<210> 21
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 21
tctccttcac gaacacggtg 20

<210> 22
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Probe

<400> 22
caccatcgtg cgcgacttct tcc 23

<210> 23
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 23
ggaaatgaca tctgtgttca tgc 23

<210> 24
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 24
tcattgtatg ttacgacttt gcagc 25

<210> 25
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Probe

<400> 25
cccgtgccct caagaagccg a 21

<210> 26
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 26
atgttccagt atgactccac tcacg 25

<210> 27
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 27
gaagacacca gtagactcca cgaca 25

<210> 28
<211> 29
<212> DNA
<213> Artificial Sequence

<220>
<223> Probe

<400> 28
aagcccatca ccatcttcca ggagcgaga 29

<210> 29
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 29
cggaggatgc accacacc 18

<210> 30
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 30
ccggttgaaa gaagtcctta aaca 24

<210> 31
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Probe

<400> 31
cccctgcctg ccaggcttgg 20

<210> 32
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 32
tgaggaaacg ccaacaccat 20

<210> 33
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 33
ccgggaacct ggagcac 17

<210> 34
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Probe

<400> 34
cctgtccctg ctcacccagc ctg 23

<210> 35
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 35
cagcgcacat gaagacttg 19

<210> 36
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 36
gtcatcttcg gtttcctgag t 21

<210> 37
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Probe

<400> 37
tccaggcagc acccctgatg 20

<210> 38
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 38
gaactccacg tgagcgca 18

<210> 39
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer

<400> 39
gggtcccatg ttgatgatgc t 21

<210> 40
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Probe

<400> 40
ctccctgata cacaccagcc cacctg 26